

Appl. No.: 10/534,617
Docket No.: DB001183-000
Amdt. Dated: 6/19/2009
Reply to Office action of 02/27/2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended)

A method of manufacturing a security thread or strip introduceable in banknotes, said security thread or strip having a microchip, comprising the steps of:

providing a support material on a substrate to form a thread or strip;
softening said support material, preferably by heating said support material;
depositing a microchip on or at least partly in the softened support material; and
curing said support material, preferably by cooling said support material.

Claim 2 (previously amended)

The method of manufacturing a security thread according to claim 1, wherein said support material is a heat-sensitive material, preferably a thermoplastic material containing a resin having a low melting point, such as wax, vinyl-polymer, polyurethane or any polymer or compound distributed in water based solvents or in any solvent that has the characteristics to modify its state from solid to soft.

Claim 3 (previously amended)

The method of manufacturing a security thread according to claim 1, wherein, in the step of softening said support material, the support material is heated by contact with a heating means or by heat radiation, preferably by an infrared beam, and ultraviolet beam or laser beam.

Claim 4 (previously amended)

The method of manufacturing a security thread according to claim 1, wherein, in the step of depositing said microchip, the microchip falls on the softened support material and sinks at least partly into the support material by its own gravity.

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Claim 5 (previously amended)

The method of manufacturing a security thread according to claim 1, wherein, in the step of depositing said support chip, said microchip is positioned on the support material, and thereafter, when the support material is still soft, the microchip is pressed into the support material by a pressing means.

Claim 6 (previously amended)

The method of manufacturing a security thread according to claim 1, comprising a step of winding up the security thread around a spool.

Claim 7 (previously amended)

The method of manufacturing a security thread according to claim 6, wherein a timing of softening said support material, depositing said microchip and/or curing said support material is set in accordance to a winding operation of the spool.

Claim 8 (previously amended)

The method of manufacturing a security thread according to claim 6 or claim 7, wherein said spool is a watermarking cylinder which has register notches and transports the security thread into a paper compound, and said timing of softening said support material, depositing said microchip and/or curing said support material is set in accordance to a detection of said register notches.

Claim 9 (currently amended)

A security thread introduceable in banknotes comprising
a substrate, preferably of polyester;
a support material provided on the substrate to form a thread,
characterized by
a microchip fixedly attached to or at least partly embedded in the support material.

Claim 10 (previously amended)

The security thread according to claim 9, wherein the support material is a heat-sensitive material.

Claim 11 (previously amended)

The security thread according to claim 9, wherein the support material comprises an adhesive or glue material which is preferably permanently active.

Claim 12 (previously amended)

The security thread according to claim 10 or claim 11, wherein a siliconated layer is removably deposited on the adhesive or glue material, or wherein a siliconated layer is deposited on the side of the thread which is opposite to the adhesive or glue material.

Claim 13 (previously amended)

The security thread according to claim 9, wherein the microchip comprises an antenna for contactless data transfer.

Claim 14 (currently amended)

A security thread introduceable in banknotes comprising,
a substrate, preferably of polyester,
a support material provided on the substrate to form a thread, and
a medium layer which carries specific characters, signs, holograms, data or any other information on a magnetic medium, metallic medium, fluorescent medium, printed medium or any other medium, wherein the medium layer is preferably located between the substrate and the support material.

Claim 15 (previously amended)

A document, preferably a paper document, comprising said security thread according to claim 9 or claim 14.